## In the Claims:

Please and amend the claims as shown in the following amended listing of claims:

## **CLAIMS:**

1. (Previously presented) A compound according to the formula (I)

wherein Z is selected from the group consisting of -S(O)<sub>2</sub>- and -C(O)-,

when Z is  $-S(O)_2$ -,  $R_a$  is selected from the group consisting of: -R1 and -N(R1)(R3), or

when Z is -C(O)-,  $R_a$  is selected from the group consisting of: -R1, -OR1, -N(R1)(R3) and -SR1,

where R1 is selected from the group consisting of:

-C<sub>1</sub>-C<sub>11</sub> alkyl, wherein each carbon may be optionally substituted with one, two or three X substituents,

-C<sub>3</sub>-C<sub>10</sub> cycloalkyl, wherein each carbon may be optionally substituted with one or two X substituents,

 $-(CH_2)_nQ_p(CH_2)_nW$ , and

-(CH<sub>2</sub>)<sub>n</sub>CHW<sub>2</sub>;

wherein each carbon of -(CH<sub>2</sub>)<sub>n</sub>- may be optionally substituted with one or two X substituents, Q is O, S, or NR3, n is independently an integer 0-6, p is

independently an integer 0 or 1, and W is independently selected from the group consisting of hydrogen, C<sub>3</sub>-C<sub>10</sub> cycloalkyl, -(C<sub>3</sub>-C<sub>10</sub> cycloalkyl)-aromatic, and one of the following aromatic or heteroaromatic rings:

where B is selected from the group consisting of: -O-, -S-, -NR6-; where each carbon of the aromatic or heteroaromatic ring may be independently replaced by a nitrogen atom, and each carbon of the aromatic ring may be independently substituted with an X substituent;

where each X substituent is independently selected from the group consisting of: hydrogen, halogen, methylenedioxy, -C<sub>1</sub>-C<sub>8</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms, -C<sub>3</sub>-C<sub>10</sub> cycloalkyl, substituted or unsubstituted phenyl, -C<sub>1</sub>-C<sub>8</sub> alkoxy, -SR3, -OH, -CY<sub>3</sub>, -OCY<sub>3</sub>, -CO<sub>2</sub>R3, -CN, -CO-NR4R5, -NO<sub>2</sub>, -COR3, -NR4R5, -NH-C(O)-R3, -NH-C(O)-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms )-aromatic, and -NH-C(O)-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-heteroaromatic;

where said phenyl when substituted is substituted with one to five substituents independently selected from the group consisting of hydrogen, halogen, methylenedioxy, -C<sub>1</sub>-C<sub>8</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms, -C<sub>3</sub>-C<sub>10</sub> cycloalkyl, -C<sub>1</sub>-C<sub>8</sub> alkoxy, -OH, -CY<sub>3</sub>, -OCY<sub>3</sub>, -CO<sub>2</sub>R<sub>3</sub>, -CN, -NO<sub>2</sub>, -COR<sub>3</sub>, -SR<sub>3</sub>, and -NH-C(O)-R<sub>3</sub>;

where each Y is independently selected from the group consisting of hydrogen and halogen;

where each R3 is independently selected from the group consisting of hydrogen, and C<sub>1</sub>-C<sub>8</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms, where C<sub>1</sub>-C<sub>8</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to eight carbon atoms may be straight or branched, saturated or unsaturated; where each R4 and R5 is independently selected from the group consisting of hydrogen, and C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms, where which each carbon of C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms is optionally substituted with a hydrogen, halogen, methylenedioxy, -C<sub>1</sub>-C<sub>8</sub> alkylene, -C<sub>3</sub>-C<sub>10</sub> cycloalkyl, substituted or unsubstituted phenyl, -C1-C8 alkoxy, -SR3, -OH, -CY<sub>3</sub>, -OCY<sub>3</sub>, -CO<sub>2</sub>R3, -CN, -NO<sub>2</sub>, -COR3, -NH-C(O)-R3, -NH-C(O)-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-aromatic, or -NH-C(O)-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-heteroaromatic, or where said R4 and said R5 taken together with the nitrogen to which they are attached, form a single heterocyclic ring of three to seven atoms including the nitrogen atom as the sole heteroatom; where -NR6- is selected from the group consisting of an N substituted with hydrogen, -(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms), -C<sub>3</sub>-C<sub>10</sub> cycloalkyl, -S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms), -S(O)2-(C3-C10 cycloalkyl), -C(O)R3, -C(O)-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-aromatic, -C(O)aromatic, S(O)<sub>2</sub>-aromatic and -S(O)<sub>2</sub>-(C<sub>1</sub>-C<sub>6</sub> saturated or unsaturated, straight or branched chain hydrocarbyl radical of from one to six carbon atoms)-

aromatic, wherein each carbon of the aromatic ring may be optionally

substituted with an X substituent; and

R2 is selected from the group consisting of cyclopentyl, cyclopentenyl, and isopropyl; or a pharmaceutically acceptable salt, optical isomer, solvate or hydrate thereof.

## 2-21. (Canceled)

- 22. (Previously presented) A method of inhibiting cyclin-dependent kinases (CDKs) by administering a compound according to claim 1 wherein the CDK is selected from the group consisting of CDK1, CDK2 and CDK4.
- 23. (Previously presented) The method according to claim 22, wherein the CDK is a constituent of a complex selected from the group consisting of CDK1/cyclin B, CDK2/cyclin E, and CDK4/cyclin D wherein the CDK4/cyclin D is selected from the group consisting of CDK4/cyclin D1, CDK4/cyclin D2 and CDK4/cyclin D3 and the complex is inhibited.
- 24. (Previously presented) A compound according to claim 1 of the formula

- 25. (Previously presented) A compound according to claim 24 wherein Z is -C(O)-.
- 26. (Previously presented) A compound according to claim 24 wherein Z is -S(O)<sub>2</sub>-.

- 27. (Previously presented) A compound according to claim 25 wherein R<sub>a</sub> is selected from the group consisting of: -OR1 and -N(R1)(R3).
- 28. (Previously presented) A compound according to claim 25 wherein R<sub>a</sub> is -SR1.
- 29. (Previously presented) A compound according to claim 27 wherein R<sub>a</sub> is -OR1.
- 30. (Previously presented) A compound according to claim 27 wherein Ra is -N(R1)(R3).
- 31. (Previously presented) A compound according to claim 1 wherein R<sub>2</sub> is cyclopentyl.
- 32. (Previously presented) A compound according to claim 1 wherein R1 is  $-(CH_2)_nQ_p(CH_2)_nW$ .
- 33. (Previously presented) A compound according to claim 30 wherein R1 is  $-(CH_2)_nQ_p(CH_2)_nW.$
- 34. (Previously presented) A compound according to claim 33 wherein W is selected from the group consisting of:

where B is -O-, -S-, -NR6-, where each carbon of the aromatic or heteroaromatic ring may be independently replaced by a nitrogen atom, and each carbon of the aromatic ring may be independently substituted with an X substituent.

- 35. (Previously presented) A compound according to claim 34 wherein W is phenyl, each carbon of which may be independently substituted with an X substituent.
- 36-47. (Canceled)
- 48 (Previously presented) The method according to claim 23, wherein the cyclin D is cyclin D1.
- 49. (Canceled)